

From: [Chip Humphrey](#)
To: [James McKenna](#)
Subject: LWG response to EPA comments on MNR modeling presentation
Date: 05/10/2011 05:06 PM

Jim - here is the MNR modeling issue I mentioned earlier today that we may want to add to the list of the topics for the June 22nd check-in.

EPA has reviewed the LWG's response to EPA's comments on the 2/23/2011 presentation materials and has further comment and clarification with regard to comments 1 and 2. Those comments requested a description of how, under MNR, sediment contaminant concentrations were modeled over time and how that information was aggregated at an AOPC or SMA basis (multiple grid cells), and how it will be evaluated whether that performance is considered suitable for achieving objectives. For dredging and capping, remedy performance is more simplistic because a post-remediation surface sediment concentration is defined (those values and rationale will be important to see also).

The LWG response was essentially that the information had been provided during the November 2009 and May 2010 modeling meetings (one exception is the source of the $t=0$ sediment concentrations was defined). However, those presentations do not provide information to address the submitted questions. The importance of the submitted request remains because the performance and suitability of MNR as a remedial objective will be a primary consideration in alternative comparisons.

At this point in model development, the the LWG should be able to describe:

"what concentration terms are used to derive sediment concentrations into the future, and what processes are modeled to feed those concentration terms." "along with the inputs, sources of those inputs, and equations used to predict future concentrations in that cell;"

The LWG offer of a mass balance for a portion of the study area is appreciated, but that is not the nature of the request in comment #2. That request focuses on the aggregation of results from a grid cell to an AOPC to make statements about the magnitude and rate of MNR processes and comparisons against empirical data to ascertain reliability of those predictions. In addition, at this point in the FS alternative screening, information should be available as to what constitutes acceptable vs. unacceptable MNR for achieving remedial objectives. This would be a logical extension of the single AOPC scenario that was requested in #2, but not provided in the LWG response.

Chip